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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Brian N. Sedlak

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EXAMINER

NGUYEN BA, HOANG VU A

ART UNIT

PAPER NUMBER

2421

NOTIFICATION DATE

DELIVERY MODE

12/24/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com

request@slwip.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/067,460	<b>Applicant(s)</b> SEDLAK ET AL.	
	<b>Examiner</b> Hoang-Vu A. Nguyen-Ba	<b>Art Unit</b> 2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 2421

### **DETAILED ACTION**

1. This action is responsive to the Request for reconsideration filed on August 31, 2009.
2. Claims 1-14 are pending. Claims 1, 5 and 9 are independent claims.

### ***Response to Arguments***

3. Applicants' arguments in the Remarks have been fully considered but they are not persuasive. The following is an examiner's response to Applicants' arguments.

As an initial matter, the examiner sincerely thanks Applicants for pointing out that there is an inconsistency in the application of the prior art references of record between the preamble of subsection 6 on page 2 and the last paragraph of page 3. The indicated reference U.S. Patent No. 5,566,175 to Davis in the preamble was due to an inadvertent typographical error. U.S. Patent No. 7,301,944 to Redmond should be considered instead to be the art reference of record.

### **Claims 1, 5 and 9**

#### Applicants' arguments

In rejecting claim 1, the Examiner relied on Schulhoff for receiving requests for a plurality of content items and for creating a list of said content items. However, the Examiner acknowledged that Schulhof did not disclose any other elements of claim 1. Consequently, the Examiner relied on Kenner to disclose "creating a request count for each content item of said plurality of content items based on said requests received" and "sorting said requests using said request count" (citing col. 5, lines 32-38 and col. 9, lines 55-67 of Kenner).

A closer reading of Kenner indicates that requests are not sorted, but that content may be duplicated and stored based on frequency of the request for the content. Specifically, "PIM records how often particular video clips are requested, and from this information determines whether those clips should be duplicated at particular local SRUs for ready display." Kenner, col. 5, lines 32-35. Kenner further recites  
[a] second function of the local search and update logic is to identify and track the most frequently requested audio-visual clips. These video clips are identified for continued storage within the local SRU . . . [ensuring that] only the most heavily used video clips are stored... [W]hen a video clip with higher usage that the least used locally stored clip is identified, the least used clip is replaced by the higher usage clip within the local SRU.  
Kennar, col. 9, lines 55-64. (emphasis added)

Clearly, these cited passages from Kenner do not disclose "sorting said requests using said request count."

#### Examiner's response

Merriam-Webster's Online Dictionary: definition of **sort**:

**1 b:** to arrange according to characteristic.

Art Unit: 2421

**3:** search.

In view of the above definitions, Kenner's recordation of how often particular video clips are requested (5:32-33), search and update logic to identify and track the most frequently requested audio-visual clips (9:55-57) and the determining of the most frequently requested audio-visual clips, which should be construed that certain counts were inherently performed in order to determine the most frequently requested clips are considered to read on the claimed *sorting said requests using said request count*.

Thus and contrary to Applicants' assertion, Kenner's teachings in the cited paragraphs do meet the claim requirements.

Applicants' arguments

The Examiner further contended that the elements "content items with a higher request count" and "content items with a lower request count" are disclosed in Kenner. Applicants respectfully remind the Examiner that USPTO personnel may not dissect a claimed invention into discrete elements and then evaluate the elements in isolation. Instead, the claim as a whole must be considered. See, e.g., *Diamond v. Diehr*, 450 U.S. 175, 188-89, 209 USPQ 1, 9 (1981). In the present case, the Examiner has separated out content items with higher and lower request counts from an element of claim 1, and merely pointed to a reference that discusses video clips with higher usage than a least used locally stored clip. Clearly, the Examiner is evaluating elements in isolation and not considering the claim as a whole.

As further proof, the Examiner found the combination of Schulhof and Kenner did "not explicitly disclose determining an associated retransmit rate for each of said content items, [that the content items with a higher request count] receiving a higher associated retransmission rate and repeatedly broadcasting the content items at said associated retransmit rate," but found Redmond disclosed this limitation. Office Action at 3 (emphasis in original). As is clearly evident by the brackets removing the limitation "that the content items with a higher request count" (see Office Action at 3), the Examiner is evaluating this claim limitation in isolation. Further, by removing a portion of the claimed element, the Examiner has failed to consider all elements of the claim.

Examiner's response

In response to Applicants' arguments that the Office action was engaged in impermissible dissection of a claimed invention into discrete elements and evaluation of the elements in isolation, it is respectfully noted that the prior art references of record are relied upon as a basis for rejection of the claimed invention because they are either in the field of applicant's endeavor or reasonably pertinent to the particular problem with which the applicant was concerned. In this case, since Schulhof, Kenner and Redmond are all related to distribution and management of media content, techniques used in any one of

Art Unit: 2421

the references can be reasonably adapted to be used in the other two references in order to improve the distribution and management of media content process.

### Applicants' arguments

With respect to Redmond, the Examiner stated that "Redmond discloses a server/client media file distribution system wherein a media file server is adapted to monitor incoming user request messages and determine an overall throughput value based on the current user's transmission speed which can be automatically adjusted and used to optimally transmit a given media file." Office Action at 3. However, claim 1 is not directed to adjusting a transmission speed. To the contrary, claim 1 recites "content items with a higher request count receiving a higher associated retransmission rate than content items with a lower request count; and repeatedly broadcasting the content items at said associated retransmit rate." A retransmit rate (e.g., a frequency of retransmission) is not the same as a transmission speed.

Additionally, the cited portion of Redmond is directed to a "traffic director [which] monitors the transmission protocol and transmission speed of each client, and uses this information to optimally transmit a given media file to one or more clients." Redmond, col.5, lines 32-35. Specifically, "the transmission speed of the server can be automatically adjusted based on the average throughput speed of the users currently in communication with the server." Redmond, col. 5, lines 52-55. Thus, the cited portion of Redmond discloses transmission based on speed and protocol and not based on a request count.

### Examiner's response

It is respectfully noted that Claim 1 recites "a retransmit rate" which is not specifically defined in Applicants' specification, therefore the Office action reasonably interpreted the claimed "retransmit rate" to read on the retransmit speed in Redmond. If Applicants intends the retransmit rate to be construed as the frequency of retransmission, Applicants are suggested to amend the claims to recite – the frequency of retransmission - -. Even assuming, *arguendo*, that the claimed retransmit rate is properly supported in the specification to be construed specifically as the frequency of retransmission, Redmond's retransmit speed which is faster would have a direct consequence on the frequency of retransmission because the content is delivered much faster such that in the end the content is delivered more times than if it is to be delivered with the normal speed.

Art Unit: 2421

**Claims 2-4, 6-8 and 10-14**

Since these claims incorporate the features discussed above with respect to base claims 1, 5 and 9, the same response is deemed applicable to claims 2-4, 6-8 and 10-14. For the additional features recited in claims 2-4, 6-8 and 10-14, see Office action herein.

***Claim Rejections – 35 USC § 103***

4. The following is a quotation of the 35 U.S.C. § 103(a) which form the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,572,442 to Schulhof et al. (“Schulhof”) in view of U.S. Patent No. 5,956,716 to Kenner et al. (“Kenner”) and further in view of U.S. Patent No. 5,566,175 to Davis (?).

**Claim 1**

Schulhof discloses *a method for transmitting requested content items in a broadband transmission system, said method comprising:*

*receiving requests for a plurality of content items on an upstream path of said broadband transmission system (see at least 10:35-41);*

*creating a list of said content items (see at least 10:35-41).*

Schulhof does not specifically disclose the remaining features of the claim.

However, in an analogous art, Kenner discloses:

Art Unit: 2421

*creating a request count for each content item of said plurality of content items based on said requests received* (see at least 5:32-35; 5:65; 9:55-65; 11:4-24; 11:33-37; 13:56-57; 14:19-22).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count for a content item as taught in Kenner in Schulhof because the use of request count for a content item would help determine which content item is frequently requested in order to optimize the distribution of these content items.

Schulhof-Kenner further discloses:

*sorting said requests using said request count* (Kenner; see at least 5:32-38; 9:55-67; 10:40-57);

*content items with a higher request count* (Kenner; see at least 9:55-60);

*content items with a lower request count* (Kenner; see at least 9:61-64).

Schulhof-Kenner does not explicitly disclose *determining an associated retransmit rate for each of said content items*, [that the content items with a higher request count] *receiving a higher associated retransmission rate and repeatedly broadcasting the content items at said associated retransmit rate*.

However, in an analogous art, Redmond discloses a server/client media file distribution system wherein a media file server is adapted to monitor incoming user request messages and determine an overall throughput value based on the current user's transmission speed which can be automatically adjusted and used to optimally transmit a given media file to one or more clients (5:28-63).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count taught by Kenner as an incoming user request message in Redmond to automatically adjust the transmission speed and thereby optimally transmit media files with higher request count.

Art Unit: 2421

**Claim 2**

The rejection of base claim 1 is incorporated. The combination Schulhof-Kenner-Redmond further discloses *wherein said request count is a number of requests received during a predefined time period for each content item of said plurality of content items* (Schulhof; see at least 10:52 – 11:5).

**Claim 3**

The rejection of base claim 1 is incorporated. The combination Schulhof- Kenner-Redmond further discloses *removing said content item from said list of content items if said request count is equal to or less than a predetermined content access count* (Schulhof; see at least 11:10 – 41).

**Claim 4**

The rejection of base claim 1 is incorporated. The combination Schulhof- Kenner-Redmond does not specifically disclose:

*grouping content items with a request count greater than or equal to a second predetermined access count into a transmit group.* However, this grouping is deemed inherent to Schulhof since Schulhof teaches that the information request manager automatically clears the bins of those program materials that never have more than 100 requests at any given time (see at least 11:10-15). By doing so, the programs materials that have more than 100 requests are grouped into a group of program materials that are popular and not to be discarded. Therefore, Schulhof does indeed teach grouping content items with a request count greater than or equal to a second predetermined access count (i.e., 100) into a transmit group.

*determining a group retransmit rate for said transmit group* (see discussion in Claim 1); *and*



Art Unit: 2421

*repeatedly broadcasting the transmit group at said retransmit rate (see discussion in Claim 1).*

### **Claim 5**

Schulhof discloses *a method for optimizing transmit bandwidth utilization in a broadband transmission system employing a content item list, said method comprising:*

*receiving requests on an upstream path of said broadband transmission system for transmission of a plurality of content items (see at least 6:24-40; 7:34-53);*

*adding one content item of said plurality of content items to said content item list if said one content item is not in said content item list (see at least 10:42 – 11:41).*

Schulhof does not specifically disclose the remaining features of the claim.

However, in an analogous art, Kenner discloses:

*determining a rate of request for each content item contained in said content item list based on said request received (see at least 5:32-35; 5:65; 9:55-65; 11:4-24; 11:33-37; 13:56-57; 14:19-22).*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count for a content item as taught in Kenner in Schulhof because the use of rate of request for a content item would help determine which content item is frequently requested in order to optimize the distribution of these content items.

Schulhof-Kenner further discloses:

*deleting content items from said content list for which the number of requests during a predefined time are less than or equal to a predefined rate of request (Schulhof; see at least 10:42 – 11:41).*

Schulhof-Kenner does not explicitly disclose *determining an associated retransmit rate for each of said content items in said content item list wherein said associated retransmit rate is*

Art Unit: 2421

*based on said rate of request and repeatedly broadcasting the content items at said associated retransmit rate.*

However, in an analogous art, Redmond discloses a server/client media file distribution system wherein a media file server is adapted to monitor incoming user request messages and determine an overall throughput value based on the current user's transmission speed which can be automatically adjusted and used to optimally transmit a given media file to one or more clients (5:28-63).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count taught by Kenner as an incoming user request message in Redmond to automatically adjust the transmission speed and thereby optimally transmit media files with higher request count.

#### **Claim 6**

The rejection of base claim 5 is incorporated. The combination Schulhof-Kenner-Redmond further discloses *wherein said content items with a higher rate of request are transmitted more frequently than content items with a lower rate of request* (Schulhof; see at least 11:16-41).

#### **Claim 7**

Rejections of base claim 5 and intervening claim 6 are incorporated. The combination Schulhof-Kenner-Redmond further discloses *wherein said broadcasting further comprises grouping of a plurality of said content items into a transmit package wherein said transmit package is of a predetermined maximum size* (Schulhof; see at least 10:66 – 11:5).

#### **Claim 8**

Art Unit: 2421

Rejections of base claim 5 and intervening claim 6 are incorporated. The combination Schulhof-Kenner-Redmond further discloses *merging said repeatedly broadcasting content items with other transmitted data* (see discussion regarding repeatedly broadcasting in Claims 1 and/or 5).

### **Claim 9**

Schulhof discloses *a system for optimizing bandwidth utilization in a broadband transmission system, said system comprising:*

*a first database containing a plurality of content items* (see at least FIG. 1, databases 14, 15, 16, 18);

*a second database containing user request information for said content items* (see at least FIG. 1, bins in the Information Request Manager software);

*a transmit unit* (see at least FIG. 1, device 26);

*a server computer* (see at least FIG. 1, system 10).

Schulhof does not specifically disclose the remaining features of the claim.

However, in an analogous art, Kenner discloses:

*a software that processes said user request information for said content items, determines a rate of request for each content item based on said user request information received* (see at least 5:32-35; 5:65; 9:55-65; 11:4-24; 11:33-37; 13:56-57; 14:19-22).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count for a content item as taught in Kenner in Schulhof because the use of rate of request for a content item would help determine which content item is frequently requested in order to optimize the distribution of these content items.

Schulhof-Kenner does not specifically disclose *determines an associated retransmit rate for each content item of said plurality of content items in said first database, said associated retransmit rate responsive to said rate of request for each content item; and*

Art Unit: 2421

*repeatedly broadcasts the transmitted content items via the transmit unit to a downstream requesting transceiver display.*

However, in an analogous art, Redmond discloses a server/client media file distribution system wherein a media file server is adapted to monitor incoming user request messages and determine an overall throughput value based on the current user's transmission speed which can be automatically adjusted and used to optimally transmit a given media file to one or more clients (5:28-63).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count taught by Kenner as an incoming user request message in Redmond to automatically adjust the transmission speed and thereby optimally transmit media files with higher request count.

#### **Claim 10**

The rejection of base claim 9 is incorporated. The combination Schulhof-Kenner-Redmond further discloses *wherein said transmit unit comprises a television transmitter* (Schulhof; see at least FIG.1, device 28).

#### **Claim 11**

The rejection of base claim 9 is incorporated. The combination Schulhof-Keller-Redmond further discloses *wherein said transmit unit comprises a server computer connected to a network* (Schulhof; see at least FIG. 1, system 10).

#### **Claim 12**

The rejection of base claim 9 is incorporated. The combination Schulhof-Kenner-Redmond further discloses *a third database containing only those of said content items*

Art Unit: 2421

*corresponding to said user request information for said content items* (Schulhof; see at least 10:35 – 11:41, e.g., various bins in the Information Request Manager).

### **Claim 13**

The rejection of base claim 9 is incorporated. The combination Schulhof-Kenner-Redmond further discloses *wherein said associated retransmit is further responsive to available bandwidth for content item broadcast* (Schulhof; see at least 11:10-41).

### **Claim 14**

The rejection of base claim 9 is incorporated. The combination Schulhof-Kenner-Redmond further discloses *wherein said associated retransmit rate of transmission is further responsive to a duration of each content item of said plurality of content items in said first database* (Schulhof; see at least 11:10-41).

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu “Antony” Nguyen-Ba whose telephone number is

Art Unit: 2421

(571) 272-3701. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:30 pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, John Miller can be reached at (571) 272-7353.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2400 Group receptionist (571) 272-2400.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

/Hoang-Vu Antony Nguyen-Ba/

Primary Examiner, Art Unit 2421

December 19, 2009

Application/Control Number: 10/067,460

Page 14

Art Unit: 2421